

NEMOPHILA

Meeting and Field Guide

CALIFORNIA BOTANICAL SOCIETY

DEC. 10, 1920

NUMBER 11

The purpose of the Society is to promote the botanical study and investigation of California plants, to diffuse knowledge concerning them, and by lectures, field-trips, exhibitions and publications to deepen interest in the native flora amongst the people of California.

FIELD TRIPS AND MEETINGS

Sunday, Dec. 26. Rockridge. Go to end of Rockridge car line. Meet 9:30 a. m. Mushrooms. Leader, Mr. A. L. Walker.

Wednesday, Jan. 5, 7:50 p. m. 2714 Benvenue Ave., Berkeley. Readings by Dr. W. L. Jepson from the Life and Letters of Sir Joseph Hooker. Also discussion of field experiences. Take College Ave. car, get off at Derby, walk west one block, thence south to middle of block on right hand side. For members only.

Sunday, Jan. 9. Redwood Peak. Take Hopkins car. Get off at Lincoln Ave., 9:00 a. m. 7 miles. Leader, Dr. Ruth T. Allen.

Wednesday, Jan. 12, 7:50 p. m. 2714 Benvenue Ave., Berkeley. Readings by Dr. W. L. Jepson from the Life and Letters of Sir Joseph Hooker. Cont. from Jan. 5. For members only.

Wednesday, Jan. 19, 7:50 p. m. 2714 Benvenue Ave., Berkeley. Readings by Dr. W. L. Jepson from the Life and Letters of Sir Joseph Hooker. Cont. from Jan. 12. For members only.

Sunday, Jan. 23. Golden Gate Park. Meet at Haight St. entrance, 10 a. m. Plants and shrubs of the Park. Leader, Miss Harriett A. Walker.

Wednesday, Jan. 26, 7:50 p. m. 2714 Benvenue Ave., Berkeley. Readings by Dr. W. L. Jepson from the Life and Letters of Sir Joseph Hooker. Cont. from Jan. 19. For members only.

Saturday, Jan. 29, 5:30 p. m. Annual Dinner at the Y. W. C. A. Cottage, Allston Way and Union St., near Sather Gate, Berkeley. Reservations with check for \$2.00 must be sent before Jan. 25 to the Secretary of the Society, 2613 Durant Ave., Berkeley.

Sunday, Feb. 6. Wild Cat Cañon. Leave end of Cragmont car line 10 a. m. 6 miles. Leader, Miss Alice Scouart.

Saturday, Feb. 19, 8:00 p. m. 212 Wheeler Hall, Berkeley. Suggestions for the improvement of native plants. A lecture by Professor E. B. Babcock.

YERBA BUENA LEAVES

Dr. Carlton Ball, head of the cereal investigations of the U. S. D. A., spent the week of Nov. 14 to 20th in California. The co-operative experiments with the University of California workers in rice and other cereals were examined and plans arranged for future work.

Dr. Elmer D. Merrill, Director of the Bureau of Science in the Philippines, has recently been visiting botanical centers in California and has now gone to Washington, D. C. Dr. Merrill has been for fifteen years actively botanizing in nearly all the islands of the archipelago and has now almost ready for publication a critical census of the flowering plants of the Philippines which is designed to serve as the groundwork for a future flora of that region.

NEW MEMBERS

The following have been elected by the Council of the Society to membership during the period from April to October, 1920: Mr. Wm. F. Ewing, Pasadena; Miss Carrie R. Sage, Selma; Miss Katherine Holmes, Berkeley; Mr. C. C. Weidemann, Berkeley; Mrs. Pearl Walther Weidemann, Berkeley; Mr. Daniel Bowen, Oakland; Mr. Otto J. Steinwand, Selma; Mr. G. F. Ferris, Stanford University; Mrs. Roxana Ferris, Stanford University; Mr. Richard Cox, Berkeley; Mr. E. C. Mentzer, San Francisco; Miss Clara N. Bishop, Oakland; Miss Dagmar Knudsen, Oakland; Miss Virginia P. Fox, Oakland; Mr. W. S. Fields, Berkeley; Miss Lorette Provost, Berkeley; Miss Katherine Dodge, Berkeley; Mr. Thos. Connell, San Francisco; Mr. Geo. C. Bartlett, Berkeley; Mrs. A. M. Frost, Selma; Miss Donella M. Cross, Mayfield; Mrs. R. D. Townsend, Selma; H. K. Padghan, Selma; Miss Donna Todd, Selma; Miss Myra Drachman, Long Beach; Miss Laura I. Dodge, Long Beach; Mr. W. W. Price, Palo Alto; Miss Lucy Gonsalves, Oakley; Mr. S. B. Parish, Berkeley; Mrs. S. B. Parish, Berkeley; Miss Cora M. Pryor, Berkeley; Miss Zella Reynolds, Oakland; Miss Mabel Reynolds, Oakland.

IN THE HUMBOLDT WOODS

A thousand thanks are due you for sending me to such a charming spot as this. I only wish we could stay longer, for just as we got to Bull Creek it came on to rain so heavily that logging was stopped for the day. So we could not go up to the camp as I hoped to do. If there exist in the state finer stands of Redwood than the flat near the mouth of Bull Creek I cannot imagine them. And whatever happens elsewhere it is most earnestly to be hoped that you can induce some one or the state to purchase and protect forever that priceless grove, which as you said far surpasses the Mariposa

grove of Big Trees. We came in wet through and I have occupied the time whilst my clothes are drying, in writing out the enclosed notes on this great Redwood forest which I propose to send to our Journal of Forestry (which is my own child), and I should be very grateful if you would look through it and erase all the errors and misapprehensions which a casual observer always makes and which I try to avoid by the experiences of others who know so much better than I do.

It was worth all the journey to see *Clintonia andrewsiana* in perfection. I have tried for years to get this alive from Carl Purdy, but the roots always came too much dried up to grow because not taken up when in ripe condition. If any of your students would lift and send me a few between November and March I think I could grow it. What a real gem it is!

My height measurements of Sequoia were made by taking a right angle with an instrument which I have always found very accurate, and measuring the base line with a tape. I am sure if one looked long enough one could find redwoods of 350 feet but it is very difficult to see their tops from the right angle.—H. J. Elwes.

It is interesting to have this opinion of Mr. Elwes on the necessity of saving the Bull Creek grove of Redwoods, since he is a distinguished student of the trees of the earth, especially as cultivated in Great Britain. Of forest trees he is an arduous cultivator at his English farm, Colesborne Park, Cheltenham.—W. L. J.

WATER HYACINTH IN CALIFORNIA

Eichornia crassipes Solm. is a species of tropical American water plant which, introduced into Florida, has become a truly colossal pest in that state, since often obstructing navigation in rivers and rendering lakes and streams unsightly. It multiplies vegetatively on the surface of the water, being held afloat by the air-bladders developed in the bases of the leaves. Although introduced into California it has not yet become a problem with us.

While it is not known whether it would menace our rivers and lakes, every precaution should be taken. At a meeting of the Society several years since it was reported by Mr. Eugene Heath as occurring in a pond east of Fresno. It has also been reported from Clarksburg, Yolo County, and from Warm Creek reservoir, San Bernardino. At the latter station, says Mr. S. B. Parish, it is beginning to move down stream.—W. L. Jepson.

PLEURICOSPORA FIMBRIOLATA IN THE SANTA CRUZ MTS.

Excellent specimens of this curious plant have been collected in the Big Basin by C. A. Reed. The entire plant is quite white in color when living, including the

flowers. The inflorescence is a simple spike, the flowers one in the axil of each bract, the lower ones pedicelled, the upper ones sessile. The variation in flower parts is shown by the following table:

Flower	Sepals	Petals	Stamens	Placentae
No. 1.....	4	4	10	6
No. 2.....	4	4	10	5
No. 3.....	5	5	10	4
No. 4.....	4	8	10	3
No. 5.....	5	5	10	6
No. 6.....	4	4	10	5
No. 7.....	4	4	10	6
No. 8.....	5	5	10	6

—W. L. Jepson.

VARIATION IN *HEMITOMES CONGESTUM*

A fine specimen of this species was recently put before me by Dr. W. C. Blasdale who had received it from Brookdale. This is an Ericaceous parasite growing on the roots of forest trees in the coastal region. The fleshy flowering spikes often barely push up above the leafy litter of the forest floor and in consequence the plant has seldom been collected. If the parasite arises from a deeply seated root it has a long spike; if it is shallowly seated it has a short spike and may resemble, at least in early stages, a subglobose scaly cone. In the earlier years of botany on the Pacific Coast each time that the plant was re-collected it was published as a new species but it is doubtful if these various forms are valid. The subglobose type of inflorescence, a sample of which has been sent from the Big Basin Park by Mr. C. A. Reed, answers to *Hemitomes pumilum* Greene. *Hemitomes spicata* (Newberrya *spicata* Gray) is doubtless also a habitual variant. The flowers are highly variable as to number of parts as shown by the following table based on the one Brookdale specimen.

Flower	Sepals	Corolla-lobes	Stamens	Placentae
No. 1	4	4	8	10
No. 2	2	4	8	6
No. 3	4	5	10	9
No. 4	2	4	8	8
No. 5	2	4	7	7
No. 6	4	6	11	10

Nos. 2, 4 and 5 were lateral flowers in the spikelets.

This parasite is a remarkable one. The stems are white when fresh and the inflorescence is a faint flesh pink. The stamens are as long as the style, and the anthers stand around the annular stigma. The annular stigma is yellow and very conspicuous, forming a yellow eye to the flower. The anther-cells are wholly polliniferous, not "half of each cell" as said for *Hemitomes subterranea* (Newberrya *subterranea* Eastw.).

—W. L. Jepson.